

FIRE SAFETY INSPECTION REPORT

UNION KNITWEAR LTD.

**UNION INDUSTRIAL COMPLEX , M.C BAZAR , SHISHU
PALLI PLUS ROAD , MULAID, TENGRA, SREEPUR**

OTHER FACTORIES: UNION GARMENTS LTD.



ACCORD
on Fire and Building Safety in Bangladesh



April 3, 2014

SUMMARY

Union Knitwear Ltd. was surveyed for fire safety on 03-04-2014 by Hughes Associates, Inc. This summary identifies the major deficiencies that were identified during the inspection.

The purpose of this survey was to identify significant fire safety issues and to provide recommendations for remediation based on applicable standards specified by the Accord. The scope of this initial fire safety inspection was limited to the review and identification of major fire safety issues. The inspection did not include identification of minor deficiencies, which will be further addressed as part of follow-up inspections.

Table 1 summarizes the major fire safety issues identified during the inspection. Recommendations have been provided to address each issue.

An implementation schedule shall be developed by the factory to remediate each of the findings. The specific timing of improvements, including any requested extensions due to design / installation constraints, shall be submitted to the Accord for approval.

Table 1. Findings And Recommendations

| No. | Category | Finding | Recommendation | Remediation Timeframe |
|-----|----------------------------|---|--|--------------------------|
| F-1 | Fire Rated Construction | The exit stairs are not separated from work areas or other spaces on each floor by fire-rated construction. | <p>Provide minimum 1.5-hr fire rated doors and seal all unprotected openings to separate the exit stairs from work areas and other building spaces on all floor levels. Ensure that the fire doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors.</p> <p>If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.</p> | Within 3 months |





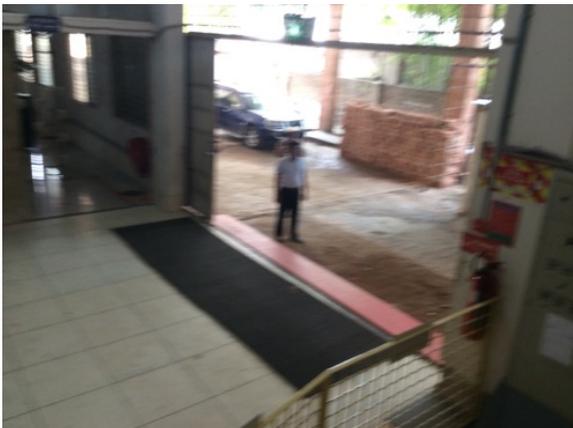
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| F-2 | Fire Rated Construction | Unsealed penetrations and openings are located in exit stair enclosures. | Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separation. | Within 3 months |
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| F-3 | Fire Rated Construction | The EMR room is completely open to the discharge of the exit stair. | Separate the EMR room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations | Within 3 months |
|-----|-------------------------|---|---|-----------------|



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| F-4 | Fire Rated Construction | Flammable liquid storage area is not separated by fire-rated construction from exit discharge due to a non-fire-rated door. | Separate the hazardous materials / flammable liquid storage room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations. | Within 3 months |
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|-----|-------------------------|---|--|-----------------|
| F-5 | Fire Rated Construction | The boiler/generator/transformer room is not separated by fire-rated construction from exit discharge due to a non-fire-rated door. | Separate the boiler/generator/transformer room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations | Within 3 months |
|-----|-------------------------|---|--|-----------------|



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| F-6 | Fire Rated Construction | Multiple storage areas were observed throughout building with no fire-rated separation from surrounding areas. | Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.4m and maximum area of 23m ² - If sprinkler protected: maximum height of 3.66m and maximum area of 93m ² Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. | Within 3 months |
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| F-7 | Egress | Egress doors and gates with locking features are provided at all exit stair openings, and exit discharge. | Remove locking features from all egress doors and gates. If locks are required for security reasons, utilize special door locking features complying with NFPA 101. | Immediate |
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F-8 Egress

Dustbins and other combustibles were observed in exit stair landings.

Remove all storage from exit stairs and egress paths.

Immediate



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| F-9 | Egress | Collapsible gates and coiling doors are provided at all exit stair openings, and exit discharge. | Replace all gates and coiling doors along the means of egress with side-hinged, swinging egress doors. If locks are required for security reasons, utilize special door locking features complying with NFPA 101. | Within 1 month |
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|------|-----------------|--|--|---|
| F-10 | Fire Protection | The fire alarm system is antiquated, not a listed system, and does not provide alarm and notification features consistent with acceptable standards. | Replace the fire alarm system with a new, listed addressable fire alarm system in accordance with NFPA 72. | Design within 4 months, install within 9 months |
|------|-----------------|--|--|---|



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|------|-----------------|---|---|-----------------|
| F-11 | Fire Protection | <p>Inspection, testing, and maintenance records for the fire alarm system were not available.</p> <p>Furthermore, alarm did not sound when functional test was performed.</p> | Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72. | Within 3 months |
|------|-----------------|---|---|-----------------|

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| F-12 | Fire Protection | The building is equipped with single-station smoke alarms. Smoke alarm activation sounds only a local alarm and does not provide automatic fire alarm notification of occupants. | Replace the single-station smoke alarms with automatic smoke detectors tied into the fire alarm system. Configure the fire alarm system to initiate occupant notification upon activation of any two smoke detectors in addition to the manual fire alarm stations. | Within 6 months |
|------|-----------------|--|---|-----------------|

